

SECTION 209 STRUCTURE EXCAVATION

209.01 DESCRIPTION. Structure excavation is excavating bridge foundations and all other structure foundations. The item includes disposing of excess or unsuitable material from the excavations, backfilling to the original ground level, bailing, pumping, draining, sheeting, shoring and cribs.

209.01.1. Structure Excavation Type I. Structure Excavation Type I is excavating, de-watering, shoring and cribbing, and backfill and compaction for the excavation.

209.01.2. Structure Excavation Type II. Structure Excavation Type II is excavating, de-watering, backfill and compaction for the excavation excluding shoring and cribbing.

209.01.3 Shoring and Cribs. This is constructing and removing all shoring and cribs, cofferdams or caissons, and for all material, labor, equipment, tools, and incidentals to complete the work.

209.02 RESERVED.

209.03 CONSTRUCTION REQUIREMENTS.

209.03.1 General. The plan excavation lines in the Contract are estimated. Excavate all foundations to the plan elevations and dimensions.

Removing boulders, logs, and other obstructions found in the excavation is incidental to this work.

Remove timber, sheeting, and other material used in the excavation before backfilling.

Remove and stockpile all excavated material that is suitable for backfill.

209.03.2 Treatment of Foundation Materials. When the excavation reaches the designated depth, de-water, clean, and maintain the excavation until the foundation bed is inspected.

Clean and fill rock seams and crevices with concrete mortar.

Obtain the Project Manager's approval of the foundation before placing concrete on the foundation.

Place concrete without disturbing the bottom of the excavation.

Minimize disturbance of the natural ground outside the excavation pay limits except as required for constructing cofferdams.

209.03.3 Cofferdams. Submit drawings and calculations prepared by a registered engineer showing the proposed method of cofferdam construction and de-watering procedures before starting the work. The cofferdam must meet O.S.H.A. requirements.

Assure cofferdams or cribs for foundation construction are watertight to permit de-watering.